

**REMARKS/ARGUMENTS**

Claims 1-37 are pending. Claims 1-37 were rejected as anticipated by U.S. Patent No. 2,974,723 to Blanchard.

Applicant respectfully traverses the rejections, because Blanchard does not teach all of the elements of each of the independent claims, as explained below.

In particular, with respect to Claim 1, Blanchard does not disclose the features indicated in italics in the following summary of the claim. Claim 1 is directed to a cutting torch capable of restricting flashback, comprising a head, an adapter, and a cutting tip. The head includes *an interior surface extending around and defining a head cavity, and an oxygen port and a fuel port each open to the head cavity*. The adapter includes a body mounted to the head and defining threads, wherein the adapter is mounted to the head by engaging the threads of the body to threads of the head. The adapter defines at least one fuel passageway that is in communication with the fuel port for receiving fuel from the fuel port, and the adapter further includes a porous structure that is a distinct component from the body and has a multiplicity of convolute passageways extending therethrough. The porous structure rotates with the adapter body when the adapter is mounted to and unmounted from the head. The adapter body defines an axially extending bore open at opposite ends of the body. The cutting tip extends through the bore of the body, *for discharging the fuel* and gas from the cutting torch.

The Office Action asserts that Blanchard's element 30 is the claimed cutting tip, that elements 16, 20, 23 collectively are the claimed adapter body, and that element 10 is the claimed head. However, Blanchard does not disclose the italicized features of Claim 1 above. In particular, the head 10 of Blanchard does not have an interior surface extending around and defining a head cavity, or an oxygen port and a fuel port each open to the head cavity as claimed. Blanchard's oxygen port 14 and fuel port 12 each opens at the end face of the generally solid cylindrical head 10 for mating with corresponding passages in the block 23; thus, these ports do not open into any head cavity.

Furthermore, Blanchard's cutting tip **30** is not for discharging both fuel and gas as claimed. The tube **30** discharges only high-pressure oxygen gas (col. 2, lines 42-45). The fuel is discharged through the orifices **18** defined by element **16**, which the Office Action equates with the claimed adapter of Claim 1.

Thus, all elements of Claim 1 are not disclosed by Blanchard. Accordingly, it is respectfully requested that the rejection of Claim 1 based on anticipation be withdrawn.

With respect to independent Claim 15, it likewise requires a head defining a head cavity and fuel and oxygen ports open to the head cavity, an adapter including a body having a bore and a porous structure, and a cutting tip that extends through the bore for discharging fuel and gas, substantially as in Claim 1. For the reasons previously indicated, it is respectfully submitted that Blanchard does not anticipate Claim 15, and Applicant respectfully requests the rejection be withdrawn.

Independent Claim 16 is drawn to an adapter for being mounted to a head of a cutting torch for cooperating with a cutting tip and restricting flashback. The adapter includes a body having threads for mounting the body to the head or for mounting the cutting tip to the body. The adapter also includes a flashback-restricting porous structure fitted to the body for being mounted to the head with the body, and for remaining with the body when the body is unmounted from the head. Blanchard's flanged nut **22** has threads for attaching to the head **10**, but cannot be construed to be the claimed adapter body because Blanchard does not teach or suggest that the porous member **24** remains with the nut **22** then the nut is unmounted from the head. Indeed, it is clear from Blanchard that the porous member **24** remains with element **16**, but element **16** and the nut **22** are separable from each other. For these reasons, it is submitted that Blanchard does not anticipate Claim 16.

Independent Claim 29 is drawn to an adapter for being mounted to a head of a cutting torch for cooperating with a cutting tip and restricting flashback. The adapter includes a body having an internal surface that extends around an axis of the body to define an axially extending bore that is open at opposite ends of the body and that is for having the cutting tip extend

therethrough, wherein the internal surface of the adapter includes an annular seat for engaging the cutting tip, and the seat extends around the axis and obliquely with respect to the axis. Blanchard does not disclose any annular seat that extends obliquely for engaging a cutting tip as claimed.

In light of the foregoing, it is respectfully submitted that each of the independent claims presented in this application is not anticipated by Blanchard. Therefore, all pending claims are not anticipated by Blanchard.

Regarding the dependent claims, additional features are recited therein that are not disclosed by Blanchard. For example, Claim 3 recites that the internal surface of the body includes an annular seat extending around the axis, and the cutting tip includes an outer annular seat engaged to the annular seat of the body to substantially close at least a portion of the head cavity. Blanchard's torch does not disclose annular seats that engage each other to close a head cavity as claimed. Claim 5 recites that a portion of the fuel passageway through the adapter is defined between the interior surface of the head and an exterior surface of the adapter. Blanchard's torch does not include any such fuel passageway. The cutting torch of Claims 7 and 8, including a radial port and a channel as recited, is not disclosed by Blanchard. Furthermore, the fastening device for fastening the porous structure as recited in Claim 10 is not taught by Blanchard.

The above-noted features in the dependent claims are merely examples of, not an exhaustive recitation of, the various additional features of the claimed invention that are not disclosed by Blanchard.

In addition, new Claims 38-41 have been added to define further subject matter not taught or suggested by Blanchard.

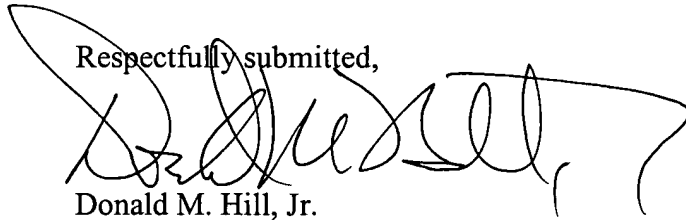
Appl. No.: 10/799,080  
Amdt. dated 10/25/2004  
Reply to Office action of July 23, 2004

Conclusion

Based on the above amendments and remarks, it is submitted that the application is in condition for allowance. The Examiner is invited to telephone the undersigned if there are any remaining issues requiring resolution before a Notice of Allowance can be issued.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefor (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

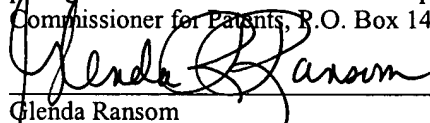


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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on October 25, 2004

  
Glenda Ransom

CLT01/4676890v1